

revolute, obovate or occasionally elliptical, 2.5 cm. to 3 cm. long and 1 cm. to 1.5 cm. wide, margin entire or sometimes bearing a few lateral teeth; apex rounded with a strong mucronate tip; base acute. Flowers not seen. Fruit subglobose, red, about 7 mm. to 9 mm. in diam., seeds prominently ribbed, about 6 mm. long. Differs from the typical form in its distinctly obovate entire leaves. It was found growing in the same scrub with *Ilex pygmaea* McFarlin. TYPE (in Herb. Univ. Mich.) S. F. Poole 5, Lake Marion, Polk County, Florida. PLATE 230.

Frutex vel arbuscula parva 2.5–3 m. alta; foliis coriaceis, persistentibus, planis vel paululo revolutis, obovatis vel ellipticis 2.5–3 cm. longis, et 1–1.5 cm. latis, integris vel aliquando dentes paucos ferentibus, apice rotundatis valde mucronatis, basi acutis. Flores ignoti. Baccae subglobosae, rubrae 7–9 mm. latae; seminibus 6 mm. longis prominenter costatae. A forma typica differt foliis integris obovatis. SPECIMEN TYPICUM (in Herb. Univ. Mich.) S. F. Poole 5, Lake Marion, Polk County, Florida.

ILEX CAROLINIANA (Walt.) Trelease var. **jejuna** var. nov. A small compact shrub 1 m. high, with numerous short gray branches, twigs usually terminating in short spurs 3 mm. to 10 mm. long, bearing many small leaves. Blade elliptical to ovate-elliptic, 2 cm. to 3 cm. long and 1 cm. to 1.5 cm. wide, glabrous, short petioled, margin serrulate; apex acute or abruptly acuminate; base acute. Flowers and fruit not seen. Differs from the typical form in its compact dwarf habit, abundance of spurs and smaller foliage. TYPE (in Herb. Univ. Mich.) J. B. McFarlin 5550, rare in the scrub, Lake Marion, Polk County, Florida. PLATE 231.

Frutex compactus parvus prope 1 m. altus; ramis numerosis brevibus griseis, virgis plerumque desinentibus in breves calcares 3–10 mm. longos multifoliosos; foliis ellipticis vel ovato-ellipticis 2–3 cm. longis, 1–1.5 cm. latis, glabris, serrulatis, apice acutis vel breviter acuminatis, basi acutis; petiolis brevibus. Flores et baccae ignotae. A forma typica differt foliis parvis, ramis multicalcaratis et habitu denso. SPECIMEN TYPICUM (in Herb. Univ. Mich.) J. B. McFarlin 5550, Lake Marion, Polk County, Florida.

NOTES ON THE FLORA OF THE STATE OF WASHINGTON—I

J. WILLIAM THOMPSON

A satisfactory flora of any western state remains to be written. Botanically speaking, the flora of the State of Washington is still in the pioneer stage. A great amount of excellent work has been done, but there are large areas which have not been even visited by a botanist. Most of the Olympic, Wenatchee, and Okanogan Mountains

have only had botanists pass through along well established trails. There is no region in the State that is in any sense "worked out," although Mr. Suksdorf has done very intensive work in Klickitat County over a long period of years. Dr. Harold St. John and Edith Hardin jointly worked the Mt. Baker region over a period of several years, listing 333 species and varieties; but the author found over forty species in two short visits which were not included in the "Flora of Mt. Baker."

The author travelled 8,000 miles about the State in 1931, many of them afoot with a heavy pack. Many new and interesting ranges were discovered, and a few new species. It is the purpose of this series to make known to botanists in general those things which may be of interest to a great number. This first paper is to report those species that are new to the State of Washington, and to describe one as new to science.

CAREX STYGIA Fries. This Alaskan and British Columbian species was found in Clallam County in the Olympic Mountains in 1927 by *I. C. Otis* 1570. This seems to be the first record for the United States.

C. LIVIDA (Wahl.) Willd. var. *GRAYANA* (Dewey) Fern. Found in a sphagnum bog between the Bogachiel and Hoh Rivers, 600 feet altitude, Olympic peninsula, *I. C. Otis* 1518.

SALIX ARCTICA Pall. Found by the author in Marmot Pass in the Olympic Mountains, at 6000 feet altitude, *Thompson* 7977. Both the staminate and pistillate plants were found near each other, each patch occupying an area as large as a city lot, and not rising as much as a foot above the earth. Dr. Ball informed me that this was a second record for the United States and a first for the State of Washington.

S. ARCTICA Pall. var. *SUBCORDATA* (And.) Schn. Found growing all over the end of a high cliff on Skyline Ridge, Mount Baker, at an elevation of 6,000 feet; only the staminate plant found. *Thompson* 5661 is the first record for the United States.

S. PETROPHILA Rydb. var. *CESPITOSA* (Kenn.) Schn. The author found this also on Skyline Ridge, Mount Baker, not far from the preceding, and intermingled with *S. nivalis* Hook. *Thompson* 8089 is the first record for the State.

S. CAUDATA (Nutt.) Heller var. *PARVIFOLIA* Ball. Another first collection for the State, being from Okanogan County near Conconully, *Thompson* 7070.

POLYGONUM VIVIPARUM L. Lyall first reported this from latitude 49°. Some of his records have not been verified by any subsequent collection, and in a few instances there is some doubt if Lyall really collected certain species in this State. But the author found this

growing abundantly near the two willows mentioned above, Skyline Ridge, Mount Baker, 6000 feet altitude, *Thompson* 8093. An amateur botanist also found it growing in the Okanogan Mountains and sent it to the author for identification, *Chas. B. Fiker* 380. These two collections remove all doubt as to its occurrence in the State of Washington.

RANUNCULUS ACRIS L. This buttercup has been found several times in this State, but it has not been officially reported before. The author found it growing along the open banks of the Dosewallops River near its mouth, Jefferson County, *Thompson* 6549.

LYTHRUM SALICARIA L. Abundantly established in Seattle along the marshy shores of Lake Washington near the University, *Thompson* 8004.

HYOSCYAMUS NIGER L. Near a deserted ranch between Conconully and Loomis, *Thompson* 7074.

ANTENNARIA MICROPHYLLA Rydb. Moist open field between Tonasket and Republic, Okanogan County, *Thompson* 7108.

ERIGERON Thompsoni S. F. Blake, sp. nov. Perennis simplex ca. 5 dm. altus subglaber paucifolius monocephalus, rhizomate elongato; caulis tenuis infra glaber supra subappresse pilosus; folia basalia 2-3 spathulato-oblongata integra 9-21 cm. longa (petiolo sparse ciliato 5-11 cm. longo incluso) 1-1.5 cm. lata obtusa basi longe acuminata firma laete viridia ciliolata ceterum glabra, caulina ca. 5 remota valde descrescentia, suprema bracteiformia; capitulum longe pedunculatum ca. 3 cm. latum; involucri ca. 4-seriati gradati 5-7 mm. alti phyllaria linearia vel interiora lineari-lanceolata acuminata ciliata eglandulosa apice laxa; radii ca. 30 albi ca. 2 mm. lati; achenia sparse hirsutula; pappus simplex.

Rhizome apparently ascending, 8 cm. long and more, about 3 mm. thick; stems solitary, erect from a short curved-ascending base, 4.5-5.5 dm. high, terete, purplish at least above, rather densely short-pilose above middle with mostly ascending or subappressed white hairs; petioles of basal leaves equalling or often exceeding the blades, sparsely ciliate chiefly above; blades of basal leaves 5-10 cm. long, obtuse or rounded, bluntly apiculate, ciliate below, ciliate toward apex with somewhat thickened-based hairs, glabrous beneath, above glabrous or thinly and inconspicuously incurved-pilosulous especially on costa, the principal lateral veins obscure, about 3 pairs; lowest stem leaves similar, the uppermost reduced to sessile elliptic subclasping bracts 7-17 mm. long, 2-5 mm. wide; peduncle 8-10 cm. long, naked or with a minute bract; disk 7-9 mm. high, 1.2-1.5 cm. wide; phyllaries purplish toward apex, especially the inner, the outermost about 0.5 mm. wide; rays white, sometimes faintly purplish-tinged in drying, 1-1.2 cm. long, the tube 2 mm. long, sparsely pilosulous toward apex, the lamina linear-elliptic, 8-10 mm. long, 2.2-2.5 mm. wide, obscurely tridenticulate, 4-nerved; disk flowers numerous, their corollas yellow, sparsely pilosulous near base of throat, 4 mm. long (tube 1.2 mm.,

throat slender-funnelform, 2 mm., teeth ovate, with slight vertical apical crest, 0.8 mm. long); achenes obovate, compressed, 5-nerved, hirsutulous chiefly above, 2–6 mm. long; pappus of about 30 white subequal hispidulous bristles 3–8 mm. long; style tips deltoid, acutish.

WASHINGTON: In open sphagnum bog near Lake Quinault, Grays Harbor Co., 10 July 1931, *J. William Thompson* 7336 (TYPE no. 1,531,366, U. S. Nat. Herb.). Duplicates of the type collection were distributed to Kew, Missouri Bot. Gard.; Phila. Acad. Sci.; Gray, Stanford, and Univ. of Calif. herbaria.

This plant is a member of the group of *Erigeron salsuginosus* (Richards.) Gray, in which the species were inexcusably multiplied by Dr. Greene. Its nearest relative, probably, is *Erigeron Aliceae* Howell (with which *E. amplifolius* Howell is synonymous), in which the rays are colored and the involucre finely glandular as well as more or less densely villous, especially toward the base.

This sphagnum bog was one of a series once completely surrounded with a dense growth of timber which has been logged-off. The *Erigeron* was associated with *Aira cespitosa* L., *Comarum palustre* L., *Myrica Gale* L., *Caltha biflora* DC., *Kalmia polifolia* Wang., and a tall white *Anemone* of the *quinquefolia* group.

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A NEW CYPRIPEDIUM HYBRID

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NEAR Eagle Lake, Waukesha County, Wisconsin, is a station rich in Lady Slippers. Here may be found *Cypripedium parviflorum*, *C. parviflorum* var. *pubescens*, *C. candidum* and *C. reginae*, all within the limits of a few acres. The locality was visited in the spring of 1931 by C. P. Gale and the writer. Near a large colony of *C. parviflorum* var. *pubescens* a plant was found that appeared to be intermediate in size and shape between that variety and *C. candidum*. The lip, although white, had the dimensions of a Large Yellow Lady Slipper. The only explanation seemed to be hybridization, but since we were in doubt as to the possibility of such an occurrence, we removed a portion of the plant to our garden for further study. This year the plant bloomed with the same peculiar characteristics above mentioned.

The original plant was growing in the transitional zone between a meadow and a gravel knoll. The meadow is underlain with marl, and